

NYC Dynamics Seminar at Yeshiva University

Omri Sarig (Weizmann Institute of Science)

will speak on

Temporal distributional limit theorems for dynamical systems of low complexity (joint work with D. Dolgopyat)

Wednesday, May 4, 5pm

Lectures will last 1 hour and be followed by 30 minutes for further lecture and/or discussion.

Yeshiva University, 215 Lexington Ave, Room 506

On the SW corner of Lexington Ave and 33rd Street. You will need to sign in.

Abstract:

The orbits of zero entropy uniquely ergodic map do NOT always all have the same qualitative behavior, but to expose the richness of the orbit structure one needs to look at second order asymptotic behavior such as the error term in the ergodic theorem. "Temporal distributional limit theorems" are a probabilistic tool for doing this.

In the first part of the talk I will explain what these theorems are, and will demonstrate them by examples. These include irrational rotations and horocycle flows. In the second part of the talk I will prove some of the results mentioned in the first part.

This is joint work with D. Dolgopyat.